

In the Claims

1. (Currently amended) An apparatus for providing electrical inter-connections between respective longitudinal electrodes of two high-frequency circuit boards, comprising:

an electrode connecting member ~~including~~ comprising a bar-shaped member having a ~~predetermined~~ sectional shape, at least a section of said bar shaped member having a U-shaped outer periphery, and ~~and including~~ a connecting electrode ~~means~~ formed on a said U-shaped outer periphery part of, said connecting electrode comprising a plurality of longitudinal electrode lines ~~an outer periphery of said bar-shaped member,~~

wherein said connecting electrode ~~means~~ is being located between said respective longitudinal electrodes of said two high-frequency circuit boards so as to provide said electrical inter-connection between the said respective longitudinal electrodes of said two high-frequency circuit boards through said plurality of longitudinal electrode lines of said connecting electrode ~~said connecting electrode means and to be sandwiched between the respective electrodes thereof, such that said respective longitudinal electrodes of said two high-frequency circuit boards are substantially parallel to each other and to said plurality of longitudinal electrode lines of said connecting electrode.~~

2. (Currently amended) The apparatus as claimed in claim 1, wherein ~~said connecting electrode means comprises a said plurality of longitudinal electrode lines are formed so as to be spaced at a predetermined interval on the said U-shaped outer periphery of said bar-shaped electrode connecting member.~~

3. (Currently amended) The apparatus as claimed in claim 1, wherein ~~said connecting longitudinal electrode line means~~ comprises a plurality of sets of connecting electrodes, respective sets of said connecting electrodes are being formed on the said outer periphery of said bar-shaped electrode connecting member so as to be spaced at a predetermined first interval corresponding to an interval between said the respective longitudinal electrodes of each of said two high-frequency circuit boards, and each of said plurality of sets of connecting electrodes is comprising ~~formed of a plurality of electrode~~

lines ~~which are~~ spaced at a predetermined second interval smaller than ~~said the~~
predetermined first interval ~~on the outer periphery of said bar-shaped member.~~

4. (Currently Amended) The apparatus as claimed in claim 1, wherein said ~~connecting plurality of longitudinal electrode lines means~~ comprises a plurality of planer solid electrodes ~~being which are~~ formed on ~~the said U-shaped~~ outer periphery of said ~~bar-shaped~~ electrode connecting member ~~so as to be~~ spaced at a predetermined first interval corresponding to an interval between ~~said the~~ respective electrodes of each of said two high-frequency circuit boards.

5.(Currently Amended) The apparatus as claimed in claim 1, further comprising:
a positioning member for positioning said electrode connecting member between ~~the~~ said two high-frequency circuit boards so that said connecting electrode ~~means~~ provides an inter-connection between ~~the said~~ respective longitudinal electrodes of ~~the said~~ two high-frequency circuit boards, said positioning member ~~so as to being~~ sandwiched between ~~the~~ said respective electrodes ~~thereof~~ said two high-frequency circuit boards.

6. (Currently Amended) The apparatus as claimed in claim 2, wherein said plurality of longitudinal electrode lines ~~is being~~ arranged to comprise a structure of a coplanar line.

7-11 (Canceled)

12.(New) The apparatus as claimed in claim 1, wherein each of said plurality of longitudinal electrode lines comprises a plurality of fine wires.

13.(New) The apparatus as claimed in claim 2, wherein each of said plurality of longitudinal electrode lines comprises a plurality of fine wires.

14.(New) The apparatus as claimed in claim 3, wherein each of said plurality of longitudinal electrode lines comprises a plurality of fine wires.

Remarks

Claims 1-6 and 12-14 are in the application.

Applicant affirms the election of claims 1-6 without traverse, and cancels claims 7-11 without prejudice and disclaimer, as indicated in the amendments submitted herewith.

Applicant submits herewith proposed drawing corrections to overcome the objections thereto. Therefore, it is respectfully submitted that drawing objections be reconsidered and withdrawn.

Regarding the rejection of claims 1, 2, and 4-6 as being anticipated by Perino et al. (hereinafter Perino) under 35 USC 102(b), this rejection is respectfully traversed.

Applicant notes that claims 1-6 have been amended as indicated above to further clarify that which is claimed as Applicant's invention. In particular, claim 1 has been amended to read as follows,

An apparatus for providing electrical inter-connections between respective longitudinal electrodes of two high-frequency circuit boards, comprising:

an electrode connecting member comprising a bar-shaped member having a sectional shape, at least a section of said bar shaped member having U-shaped outer periphery, and a connecting electrode formed on said U-shaped outer periphery, said connecting electrode comprising a plurality of longitudinal electrode lines,

wherein said connecting electrode being located between the respective longitudinal electrodes of said two high-frequency circuit boards to provide said electrical inter-connection between said respective longitudinal electrodes of said

two high-frequency circuit boards through said plurality of longitudinal electrode lines of said connecting electrode, such that said respective longitudinal electrodes of said two high-frequency circuit boards are substantially parallel to each other and to said plurality of longitudinal electrode lines of said connecting electrode.

Referring to the cited and relied upon Perino, it is respectfully submitted that Perino does not disclose or suggest that which is recited in claim 1, as amended herein. That is, Perino does not disclose an electrode connecting member comprising a bar-shaped member having a U-shaped outer periphery, a connecting electrode formed on the U-shaped outer periphery, or the connecting electrode comprising a plurality of longitudinal electrode lines, wherein the connecting electrode being located between the respective longitudinal electrodes of the two high-frequency circuit boards to provide the electrical inter-connection between the respective longitudinal electrodes of the two high-frequency circuit boards through the plurality of longitudinal electrode lines of the connecting electrode.

It is particularly pointed out that Perino does not disclose or suggest the claimed connecting electrode formed on the U-shaped outer periphery of the bar-shaped member of the electrode connecting member, and a connecting electrode formed on the U-shaped outer periphery, wherein the connecting electrode comprises a plurality of longitudinal electrode lines. Support for Applicant's claim language may be found in the specification at least at page 9, ln. 2 - page 12, ln. 23; and Figs. 1-3.

It is additionally stressed that claim 1 recites, inter alia, that the electrode connecting member and the two high-frequency circuit boards are configured such that the respective longitudinal electrodes of the two high-frequency circuit boards are substantially parallel to each other and to the plurality of longitudinal electrode lines of said connecting electrode. No such configuration is disclosed or suggested by any of the numerous figures and accompanying disclosure of Perino.

Perino discloses a substrate, for example, base 860 having a top 861 and a bottom 862 that conduct electrical signals only in substantially vertical directions therebetween (See Perino, col. 9, ln. 55-65; and col. 10, ln. 50-54). Clearly, Perino does not disclose or suggest the claimed

connecting electrode formed on the U-shaped outer periphery of the bar-shaped member of the electrode connecting member, and a connecting electrode formed on the U-shaped outer periphery, the connecting electrode comprising a plurality of longitudinal electrode lines.

For at least the reasons set forth above, it is submitted that the rejection of claim 1 under 35 U.S.C. 102(b) is erroneous and should be withdrawn. Claims 2 and 4-6 depend from claim 1 and are patentable over Perino for at least the same reasons stated above regarding independent claim 1.

Newly added claims 12 and 13 depend from claim 1 and 2, respectively, and are also patentable over Perino for at least the same reasons stated above regarding claim 1.

The Office Action rejects claim 3 under 35 U.S.C 103(a) as unpatentable over Perino in view of Susuki. This rejection is respectfully traversed.

The basis and rationale for the rejection of claim 3 is heavily dependant on the alleged disclosure of Perino (as discussed and refuted above) combined with Susuki (for disclosing a set of connecting electrodes formed with a plurality of electrode lines spaced at a second interval smaller than the first interval on the outer periphery of the bar-shaped member). Susuki is only cited to show a set of connecting electrodes formed with a plurality of electrode lines, but fails to make obvious the substantial differences set forth above with regard to Perino.

For at least the reasons set forth above, it is submitted that the rejection of claim 3 under 35 U.S.C. 103(a) is erroneous and should be withdrawn.

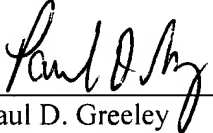
Newly added claim 14 depends from claim 3 and is also patentable over Perino for at least the same reasons stated above regarding claim 3.

Newly presented claims 12-14 depend from claims 1-3, respectively. Support for claims 12-14 may be found in Figs. 1-6, and the discussion of same in the specification. No new matter has been added as a result of the amendments submitted herewith. Accordingly, it is submitted that claims 12-14 distinguish from the cited art and are, therefore, allowable.

It is respectfully requested for the reasons set forth above that the rejections under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) be withdrawn, that claims 1-6 and 12-14 be allowed, and that this application be passed to issue.

Respectfully submitted,

7-28-03
Date



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Fig.2

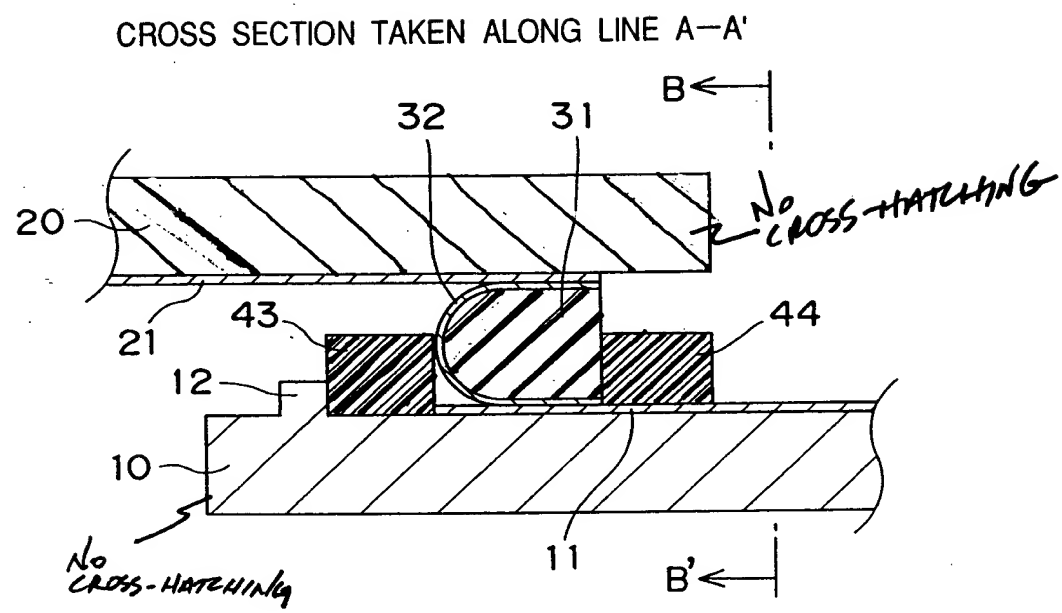


Fig.3

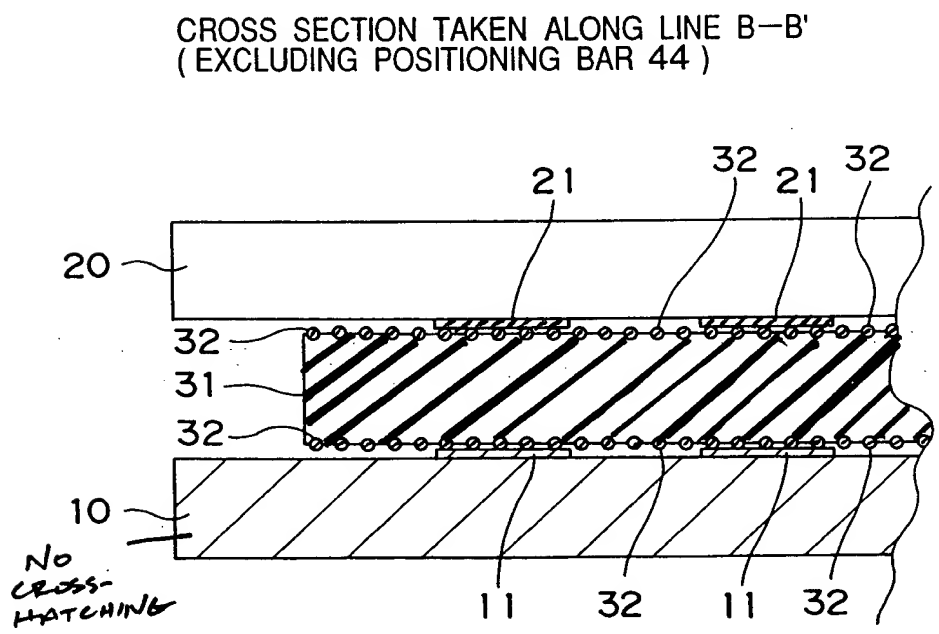


Fig.5A

FIRST MODIFIED
PREFERRED EMBODIMENT

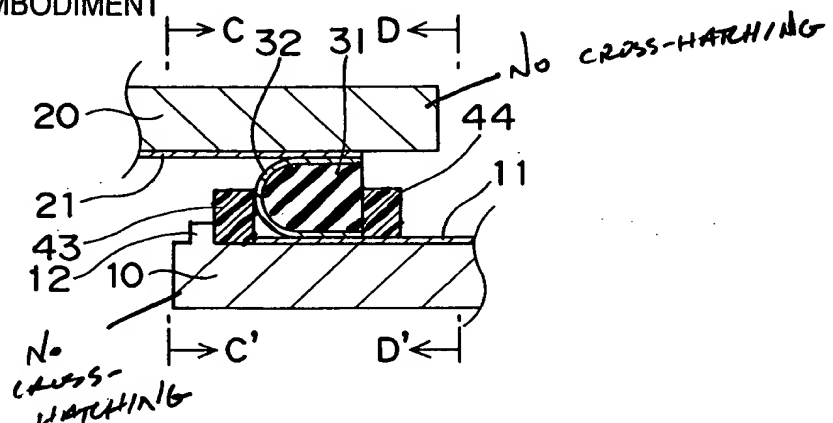


Fig.5B

CROSS SECTION TAKEN ALONG LINE C-C'
(EXCLUDING POSITIONING PROJECTION 12
AND POSITIONING BAR 43)

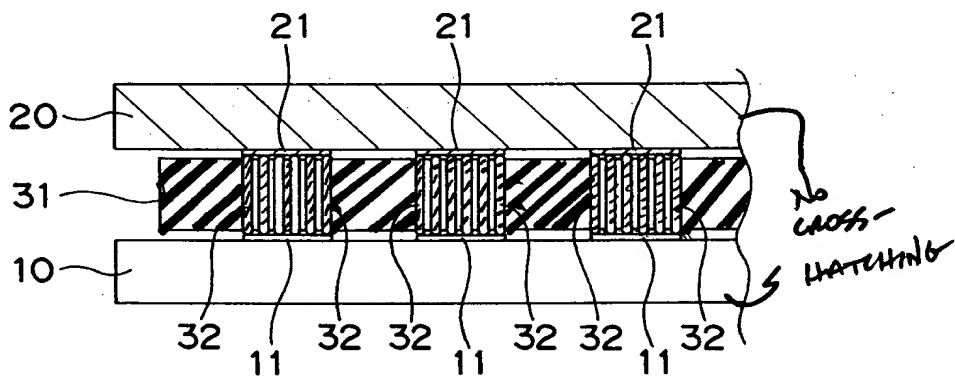


Fig.5C

CROSS SECTION TAKEN ALONG LINE D-D'
(EXCLUDING POSITIONING BAR 44)

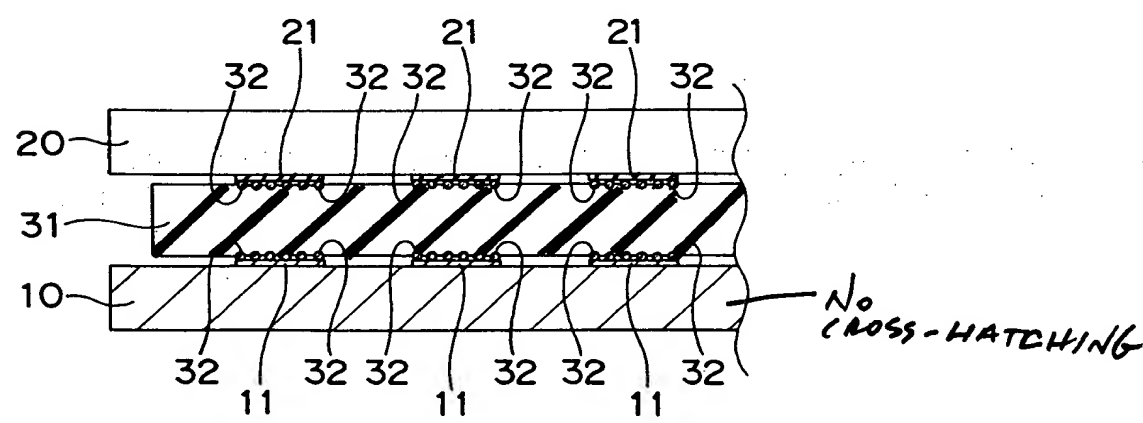




Fig.6A

SECOND MODIFIED
PREFERRED EMBODIMENT

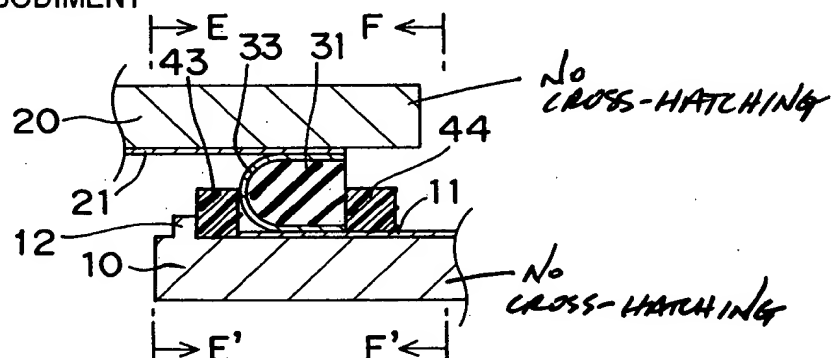


Fig.6B

CROSS SECTION TAKEN ALONG LINE E-E'
(EXCLUDING POSITIONING PROJECTION 12
AND POSITIONING BAR 43)

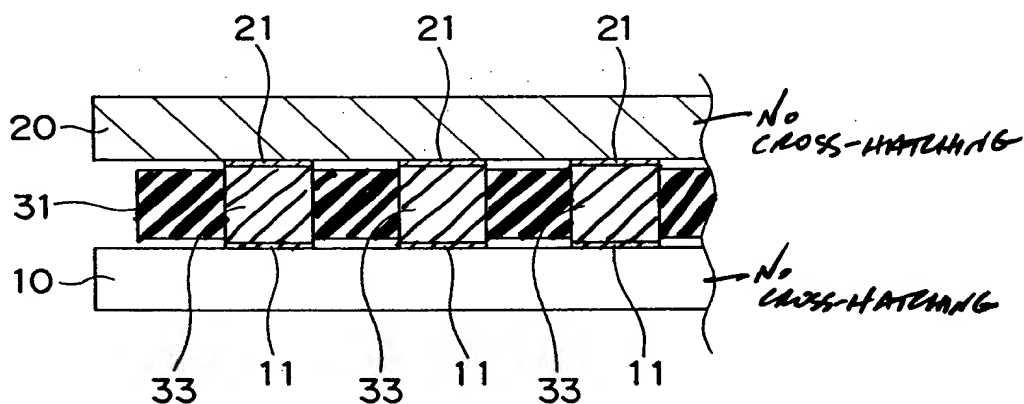


Fig.6C

CROSS SECTION TAKEN ALONG LINE F-F'
(EXCLUDING POSITIONING BAR 44)

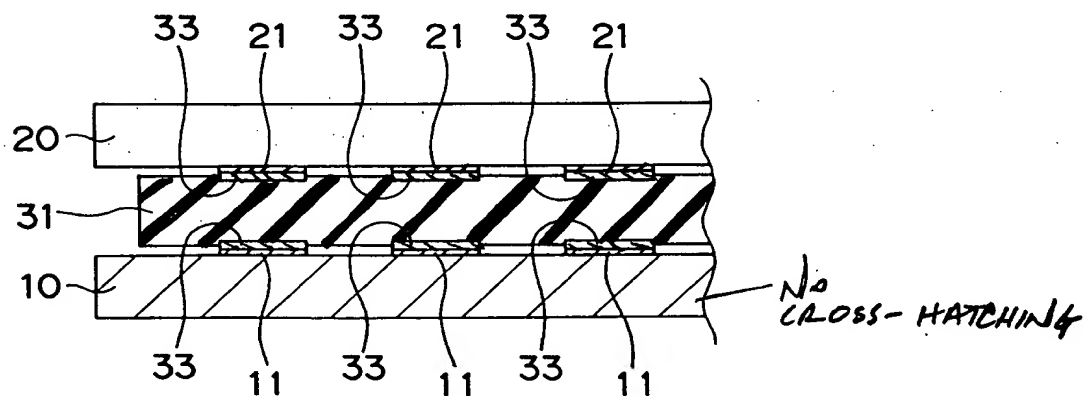




Fig.8 PRIOR ART

CROSS SECTION TAKEN ALONG LINE G-G'

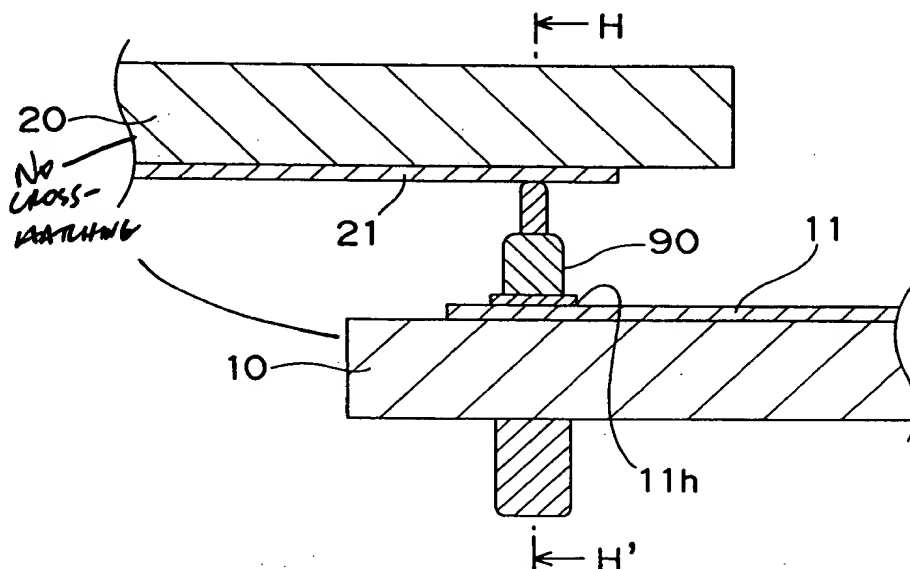


Fig.9 PRIOR ART

CROSS SECTION TAKEN ALONG LINE H-H'

